(4000-02100)

## REMARKS

The Final Office Action mailed September 23, 2005, and the references cited by the Examiner have been carefully reviewed by Applicants. Applicants have amended Claim 1, and Claims 2-21 are also pending in this case. Applicants submit that, for the reasons discussed below, the pending claims are in condition for allowance and Applicants earnestly seek such allowance.

### In-Person Interview

Applicants' attorney, Michael Piper, had an in-person interview with the Examiner on October 25, 2005. Applicants' attorney appreciates the Examiner's time and assistance during the interview. During the interview the Examiner suggested that, based on Applicants' analysis of the Kuznetsov reference cited by the Examiner, the pending claims would likely be allowable provided that Claim 1 be amended to clarify that the first and second middleware computing systems were communicating the message with a first and second applications, respectfully. Since the Examiner indicated that an additional search might be conducted, the Examiner suggested that Applicants' memorialize, in a Request for Continued Examination (RCE), Applicants' analysis of the differences between the Kuznetsov reference and pending Claims.

### Response to Rejections under Section 102

In the Office Action dated September 23, 2005, the Examiner rejected Claims 1, 6-7, and 11-16 under 35 USC § 102(a) as being anticipated by Kuznestov (U.S. Patent No. 6,772,413). Applicants have carefully reviewed the cited reference, the Examiner's reasons for rejection, and the pending Claims. The Kuznetsov reference appears to be directed to a system where data is "converted directly from one format to another without first converting to an intermediate format." (Kuznetsov col. 7, lines 3-5) Applicants' system, as described in one embodiment, converts messages between native formats such as JMS, CORBA, and Cobol copybook using an intermediate message format – a structured event message in structured event format. Thus

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Applicants' invention does exactly what the Kuznetsov reference teaches not to do – convert to
an intermediate format.

Applicant's invention may be viewed as middleware for middleware. That is, JMS
messaging systems may receive messages destined for CORBA or mainframe systems and vice
versa. Since the messages of these systems are incompatible, the messages must be converted
before they can be used. The Kuznetsov reference cited by the Examiner suggests that the
messages be converted directly from a source format to the destination format. However, the
present system includes a middleware brokering system where the messages from these various
middleware systems are sent. Instead of converting directly from one format to another, the
messages are sent to a middleware brokering server and converted into an intermediate format,
the structured event message format. More specifically, Applicants' invention as claimed in
Claim 1 provides a method for asynchronous brokering of messages between middleware
computing systems. The method includes a) receiving a message sent from a first application
into a first middleware computing system, and b) receiving the message sent from the first
middleware computing system into a middleware brokering server. The method also provides
for sending the message from the middleware brokering server to a second middleware
computing system that receives the message, and d) sending the message from the second
middleware computing system to a second application that receives the message. Applicants
have amended Claim 1 to include that the first middleware computing system receives the
message from a first application and further to include that the second middleware computing
system sends the message to a second application. Applicants have amended Claim 1 to clarify
that the first and second middleware computing systems are middleware systems that receive and
send the messages from the first and second applications, respectively.

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Applicants have carefully reviewed the text (col. 12, lines 39-55) in Kuznetsov cited in

rejecting Claim 1. However the cited text fails to provide any disclosure, teaching, or suggestion

of a middleware brokering server, as claimed in Applicants' Claim 1. The cited text discloses

creating a data map (DMAP) and using the formal machine-readable format description

(FMRFD) to translate bytes in format X to bytes in format Y. The FMRFDs are merely machine

code to convert data packets from one format to another, and are not analogous to Applicants'

first and second middleware computing systems. The cited text teaches sending messages

directly between a first and second FMRFD to convert data directly from X format and to Y

format. Therefore, the FMRFDs are end nodes and not middle nodes or servers such as

Applicants middleware brokering server. The Kuznetsov reference fails to teaches or disclose

Applicants' middleware brokering server that brokers messages between the first and second

middleware and uses an interim format Z.

Also cited in rejecting Claim 1 was Kuznetsov (col. 7, lines 55-col.8, line 7). Again, the

cited text discloses that transmitting node A can be equipped with a translator that first translates

a message into the destination format of node F. This text states that nodes A and F may

negotiate with one another to determine which node will perform the translation. Applicants

question whether nodes A and F are analogous to Applicants' first and second middleware.

However Applicants respectfully submit that neither node A or F is a middleware brokering

server since it is clear that they are system end nodes (see Kuznetsov Fig. 1) where data is

converted directly from a first format to an end format. The Kuznetsov reference fails to teach,

disclose, or suggest a middleware brokering server where data is converted into an interim

format between a first and second middleware computing systems. Finally, Kuznetsov fails to

teach a first and second applications that communicate with the first and second middleware

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computing systems, respectively, to send and receive the message. For these reasons, Applicants request the Examiner to withdraw the rejection of amended Claim 1 and pass same to issue.

The Examiner points to Kuznetsov (col. 10, line 47-col.11, line 6) in support of the rejection of Claims 7, and 11-16. The cited text discloses translating from a source to a destination data format to avoid translating to the intermediate format. However, Applicants' invention as claimed in Claims 7 and 11-16 is directed to converting from the format of the first middleware computing system (native language format) to the intermediate format (structured event format) of the middleware brokering server. The teachings of Kuznetsov would suggest avoiding converting to the interim format and instead directly converting from the format of the first middleware computing system to the format of the second middleware computing system. Since the cited reference fails to teach this aspect of Applicants' invention, Applicants respectfully request that the Examiner withdraw the rejection of these Claims and pass same to issue.

### Response to Rejections under Section 103

In the Office Action dated September 23, 2005, the Examiner rejected Claims 2-5, 8-10, and 17-21 under 35 USC § 103(a) as being unpatentable over Kuznestov (U.S. Patent No. 6,772,413). Regarding Claim 2 the Examiner points to Kuznetsov (col. 3, line 33) which discloses using large numbers of different platforms. The Kuznetsov reference fails to provide any teaching or disclosure of Cobol copybook message format, JMS messages, CORBA, structured event messages, structured event message format, or related or supported middleware systems. An obviousness rejection is improper unless the cited references teach, disclose, or suggest each and every element of the rejected claims. Applicants respectfully submit that the

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Kuznetsov reference fails to teach, disclose, or even suggest, either alone or in combination with other references, Applicants' invention where the first and second middleware computing systems are selected from mainframe, CORBA, or JMS middleware computing system. For this reason, Applicants submit that pending Claim 2 is allowable.

The text at Kuznetsov (col. 9, line 34-col. 10, line 5) is cited in rejecting Claim 3. The cited text discloses a business router for routing messages to destination nodes, such as another B2B router or another server. The cited text fails to teach, disclose, or suggest that the middleware brokering server communicates with the receiving second middleware computing system via publish and subscribe messaging. In fact, Kuznetsov fails to teach, disclose, or suggest publish/subscribe messaging as used in any context. For this reason, Applicants respectfully submit that Claim 3 is allowable.

Applicants submit that Claims 4-5 are allowable as being dependent claims that contain additional novel aspects and depend from allowable base claims.

Applicants submit that Claims 8-10 and 17-19 are allowable for the reasons stated above. Specifically, the Kuznetsov reference fails to provide any teaching or disclosure of Cobol copybook message format, JMS messages, CORBA, structured event messages or structured event message format, and an obviousness rejection is improper unless the cited references teach, disclose, or suggest each and every element of the rejected claims.

Regarding Claim 20, Applicants respectfully submit that, as noted above, the Kuznetsov reference fails to disclose publish-subscribe messaging or similar functionality. Further the business-to-business router 601 discloses business based data packet routing, which is not analogous to a publish and subscribe messaging system including a push-pull paradigm across

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one messaging channel, as claimed in Applicants' Claim 20. For this reason, Applicants submit that Claim 20 is allowable.

The Examiner points to col. 10, lines 24-32 as disclosing Applicants' invention as claimed in Claim 21. However, the cited text notes creating a new handler when none exits for the selected node combination with optimization criteria. The cited text and following paragraph (col. 10, lines 34-46) suggest that "optimization criteria" refers to the selection of handlers that are appropriate for the give data translation, and that "optimization criteria" does not relate to service or quality commitment characteristics of the message or data as claimed by Applicants in Claim 21. Since the cited text fails to teach, disclose, or suggest the designation of quality of service for a channel, Applicants submit that Claim 21 is allowable as well.

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## Conclusion

Applicants respectfully submit that the application in its present form is in condition for allowance. If the Examiner has any questions or comments or otherwise feels it would be helpful in expediting the application, Examiner is encouraged to telephone the undersigned at (972) 731-2288. Applicants intend this communication to be a complete response to the Office Action mailed on September 23, 2005.
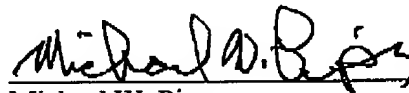
The Commissioner is hereby authorized to charge payment of any further fees associated with any of the foregoing papers submitted herewith, or to credit any overpayment thereof, to Deposit Account No. 21-0765, Sprint.

Respectfully submitted,

CONLEY ROSE, P.C.

Date: <u>December 22, 2005</u>

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